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Attorney Docket No. 87141181.242002

AMENDMENTS TO THE CLAIMS

Below is the entire set of pending claims pursuant to 37 C.F.R §1.121(c)(3)(i), with any mark-ups showing the changes made by the present Amendment.

1. (Previously presented) A method for manufacturing an organic electroluminescent display, comprising:

forming a substantially transparent substrate;

forming a plurality of first display electrodes arranged in parallel on said substrate;

forming a non-photosensitive insulating layer over said substrate;

applying a cross-linking process to said non-photosensitive insulating layer;

forming a photosensitive insulating layer on said non-photosensitive insulating layer;

performing a photolithography process on said photosensitive insulating layer;

developing said photosensitive insulating layer and etching said non-photosensitive insulating layer so as to form a pattern of photosensitive insulating layer and non-photosensitive insulating layer having a shape with a longitudinal axis substantially perpendicular to a longitudinal axis of the first display electrodes, and the first display electrodes being exposed partly;

forming an organic electroluminescent material on the exposed first display electrodes;

and

forming a plurality of second display electrodes on the organic electroluminescent material.

2. (Original) The method according to claim 1, wherein the non-photosensitive

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insulating layer is made of a thermal type polyimide.

3. (Original) The method according to claim 1, wherein the thickness of the non-photosensitive insulating layer is in a range of 0.5-2 μ m.
4. (Previously presented) The method according to claim 1, wherein applying a cross-linking process to the non-photosensitive insulating layer comprises performing a baking process.
5. (Currently amended) The method according to claim 4, wherein the temperature of the baking process is in a range of ~~about~~ 120-180 Celsius degrees.
6. (Currently amended) The method according to claim 4, wherein the duration time of the baking process is in a range of ~~about~~ 20-60 minutes.
7. (Currently amended) The method according to claim 1, wherein the thickness of the photosensitive insulating layer is in a range of ~~about~~ 3-5 μ m.
8. (Currently amended) The method according to claim 1, wherein the exposure to the photosensitive insulating layer during the photolithography process is in a range of ~~about~~ 30-80mJ/cm².
9. (Previously presented) The method according to claim 1, wherein developing the

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photosensitive insulating layer and etching the non-photosensitive insulating layer is proceeded through a developer solution.

10. (Previously presented) The method according to claim 9, wherein the developer solution is TMAH 2.38%.

11. (Currently amended) The method according to claim 9, wherein the duration time for developing the photosensitive insulating layer and etching the non-photosensitive insulating layer is in a range of about 50-100 seconds.

12. (Previously presented) The method according to claim 1, wherein the photosensitive insulating layer is developed into a reversed trapezoid shape.

13. (Previously presented) The method according to claim 12, wherein a long base of the reversed trapezoid shape of the photosensitive insulating layer is longer than or equal to a bottom edge of the shape of the etched non-photosensitive insulating layer.

14. (Previously presented) The method according to claim 1, wherein the non-photosensitive insulating layer is etched into a trapezoid shape.

15. (Previously presented) The method according to claim 14, wherein a top edge of the shape of the developed photosensitive insulating layer is longer than or equal to a long base of the trapezoid shape of the non-photosensitive insulating layer.

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16. (Previously presented) The method according to claim 1, wherein developing the photosensitive insulating layer and etching the non-photosensitive insulating layer further comprises performing a curing process.

17. (Currently amended) The method according to claim 16, wherein the temperature of the curing process is in a range of about 200-350 Celsius degrees.

18. (Currently amended) The method according to claim 16, wherein the duration time of the curing process is in a range of about 30-120 minutes.

19. (Previously presented) A method for manufacturing an organic electroluminescent display, comprising:

forming a substantially transparent substrate;

forming a plurality of first display electrodes arranged in parallel on said substrate;

forming a non-photosensitive insulating layer over said substrate;

applying a baking process to said non-photosensitive insulating layer;

forming a photosensitive insulating layer on said non-photosensitive insulating layer, and pre-baking said photosensitive insulating layer;

performing a photolithography process on said photosensitive insulating layer so as to define a shape having a longitudinal axis perpendicular to a longitudinal axis of the first display electrodes, and performing a post-exposure baking process on said photosensitive insulating layer;

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dipping an aggregate composed of said substrate with said first display electrodes, said non-photosensitive insulating layer and said photosensitive insulating layer disposed thereon into a developer solution, whereby said photosensitive insulating layer is partially removed through development and said non-photosensitive insulating layer is partially removed by etching, and thereby said first display electrodes are exposed partially;

curing said aggregate;

forming an organic electroluminescent material on the exposed first display electrodes;

and

forming a plurality of second display electrodes on the organic electroluminescent material.

20. (Original) The method according to claim 19, wherein the non-photosensitive insulating layer is made of a thermal type polyimide.

21. (Currently amended) The method according to claim 19, wherein the temperature of baking said non-photosensitive insulating layer is in a range of about 50-120 Celsius degrees.

22. (Currently amended) The method according to claim 19, wherein the temperature of post-exposure baking said photosensitive insulating layer is in a range of about 90-150 Celsius degrees.

23. (Currently amended) The method according to claim 19, wherein the duration time of post-exposure baking said photosensitive insulating layer is in a range of about 30-120

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seconds.

24. (Previously presented) The method according to claim 19, wherein the photosensitive insulating layer is developed into a reversed trapezoid shape.

25. (Previously presented) The method according to claim 24, wherein a long base of the reversed trapezoid shape of the photosensitive insulating layer is longer than or equal to a bottom edge of the shape of the etched non-photosensitive insulating layer.

26. (Previously presented) The method according to claim 19, wherein the non-photosensitive insulating layer is etched into a trapezoid shape.

27. (Previously presented) The method according to claim 26, wherein a top edge of the shape of the developed photosensitive insulating layer is longer than or equal to a long base of the trapezoid shape of the non-photosensitive insulating layer.

28. (Previously presented) A method for manufacturing an organic electroluminescent display, comprising:

forming a substantially transparent substrate;

forming a plurality of first display electrodes arranged in parallel on said substrate;

forming a first photosensitive insulating layer over said substrate;

forming a second photosensitive insulating layer on said first photosensitive insulating layer;

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performing a photolithography process on said first and second photosensitive insulating layers;

developing said first and second photosensitive insulating layers simultaneously so as to form a pattern of first and second photosensitive insulating layers having a shape with a longitudinal axis substantially perpendicular to a longitudinal axis of the first display electrodes, and the first display electrodes being exposed partly;

forming an organic electroluminescent material on the exposed first display electrodes;

and

forming a plurality of second display electrodes on the organic electroluminescent material,

wherein the photosensitivity of the first photosensitive insulating layer is different from that of the second photosensitive insulating layer.

29. (Previously presented) The method according to claim 28, wherein developing said first and second photosensitive insulating layers is proceeded through a developer solution.

30. (Original) The method according to claim 28, wherein the photosensitivity of said first photosensitive insulating layer is greater than that of said second photosensitive insulating layer.

31. (Previously presented) A method for manufacturing an organic electroluminescent display, comprising:

forming a substantially transparent substrate;

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forming a plurality of first display electrodes arranged in parallel on said substrate;

forming a first photosensitive insulating layer over said substrate;

forming a second photosensitive insulating layer on said first photosensitive insulating layer;

performing a photolithography process on said first and second photosensitive insulating layers so as to define a shape having a longitudinal axis perpendicular to a longitudinal axis of the first display electrodes;

dipping an aggregate composed of said substrate with said first display electrodes, said first photosensitive insulating layer and said second photosensitive insulating layer disposed thereon into a developer solution, whereby said first and second photosensitive insulating layers are partially removed through development, and thereby said first display electrodes are exposed partially;

forming an organic electroluminescent material on the exposed first display electrodes;

and

forming a plurality of second display electrodes on the organic electroluminescent material.

32. (Original) The method according to claim 31, wherein the photosensitivity of said first photosensitive insulating layer is greater than that of said second photosensitive insulating layer.

33. (Currently amended) A method for manufacturing an electroluminescent display, comprising:

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forming a first electrode on a substantially transparent substrate;
forming a non-photosensitive insulating layer to cover said first electrode;
forming a photosensitive insulating layer on said non-photosensitive insulating layer;
applying a photolithography process to said photosensitive insulating layer;
developing said photosensitive insulating layer and etching said non-photosensitive insulating layer using one same active solution to form a pattern of insulating material that partially exposes the first electrode;

forming an organic electroluminescent material on the exposed first electrode; and
forming a second electrode on the organic electroluminescent material.

34. (Previously presented) The method according to claim 33, further comprising applying a cross-linking process to said non-photosensitive insulating layer.

35. (Currently amended) A method for manufacturing an electroluminescent display, comprising:

forming a first electrode on a substantially transparent substrate;
forming a non-photosensitive insulating layer to cover said first electrode;
applying a cross-linking process to said non-photosensitive insulating layer;
forming a photosensitive insulating layer on said non-photosensitive insulating layer;
applying a photolithography process to said photosensitive insulating layer;
developing said photosensitive insulating layer and etching said non-photosensitive insulating layer to form a pattern of insulating material that partially exposes the first electrode;
forming an organic electroluminescent material on the exposed first electrode; and

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forming a second electrode on the organic electroluminescent material.

36. (Currently amended) A method for manufacturing an electroluminescent display, comprising:

forming a first electrode on a substantially transparent substrate;

forming a first photosensitive insulating layer to cover said first electrode over said substrate;

forming a second photosensitive insulating layer on said first photosensitive insulating layer, wherein the photosensitivity of the first photosensitive insulating layer is different from that of the second photosensitive insulating layer;

applying a photolithography process to said first and second photosensitive insulating layers;

developing said first and second photosensitive insulating layers to form a pattern of insulating material that partially exposes the first electrode;

forming an organic electroluminescent material on the exposed first electrode; and

forming a second electrode on the organic electroluminescent material.